Empowering Our Clean Energy Future

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UNINCORPORATED SOLANO COUNTY | BENICIA | CONCORD | DANVILLE | EL CERRITO
FAIRFIELD | HERCULES | LAFAYETTE | MARTINEZ | MORAGA | OAKLEY | PINOLE
PITTSBURG | PLEASANT HILL | RICHMOND | SAN PABLO | SAN RAMON | WALNUT CREEK

MCE Board of Directors Meeting
Thursday, July 17, 2025
6:30 p.m.

1125 Tamalpais Avenue, San Rafael, CA 94901
2300 Clayton Road, Suite 1500, Concord, CA 94520
955 School Street, Napa, CA 94559, City Hall Committee Room **(City of Napa)**
675 Texas Street, Fairfield, CA 94533, First Floor Hearing Room **(County of Solano)**

Public comments may be made in person or remotely via the details below.
Remote Public Meeting Participation

Video Conference: https://zoomto.me/F6Ogt
Phone: Dial (669) 900-9128, Meeting ID: 890 0487 7785, Passcode: 525690

Materials related to this agenda are available for physical inspection at MCE's offices in San Rafael at 1125 Tamalpais Ave, San Rafael, CA 94901.

DISABLED ACCOMMODATION: If you are a person with a disability who requires an accommodation or an alternative format, please contact MCE at (888) 632-3674 or ada-coordinator@mceCleanEnergy.org at least 72 hours before the meeting start time to ensure arrangements are made.

1. Roll Call/Quorum
2. Board Announcements (Discussion)
3. Public Open Time (Discussion)
4. Report from Chief Executive Officer (Discussion)
5. Consent Calendar (Discussion/Action)
   - C.1. Approval of 5.15.25 Meeting Minutes
   - C.2. Approved Contracts for Energy Update

C.3 Proposed Resolution No. 2025-03 Establishing the Date, Time, and Location of Regular Board Meetings

C.4 Proposed MCE Policy 019 – Disposition of Surplus Property

C.5 Adoption of Revised MCE Load Management Standards Plan

C.6 Proposed Resolution 2025-04 Authorizing the CEO to Negotiate and Execute Vendor Services Agreements with Community Energy and Equity Resources LLC, Serious Controls LLC, and Lawrence Berkeley National Laboratory for MCE's Virtual Power Plant Program Supported by Funding from the California Energy Commission

6. MCE 24x7 Renewable Energy Pilot Proposal (Discussion/Action)

7. Update of Deep Green Premium Proposed Effective Date October 1, 2025 (Discussion/Action)

8. Customer Operations Update (Discussion)

9. Board & Staff Matters (Discussion)

10. Adjourn

The Board of Directors may discuss and/or take action on any or all of the items listed on the agenda irrespective of how the items are described.

Empowering Our Clean Energy Future
CONTRA COSTA | MARIN | NAPA | SOLANO

July 17, 2025

TO:	MCE Board of Directors
FROM:	Jonnie Kipyator, Power Analytics Senior Manager
RE:	MCE 24/7 Renewable Energy Pilot Proposal (Agenda Item #06)
ATTACHMENT:	MCE 24/7 Pilot Proposal

Dear Board Members:

Summary

On August 17, 2023, MCE Board of Directors (Board) elected to pause Deep Green auto enrollments and make Light Green the default service option. Additionally, the Board directed staff to explore a new service offering - 100% GHG-Free product that will match hourly customer load with supply. On May 3, 2024, MCE staff presented the Proposed 24/7 Fossil-Free Pilot Energy Service to the Technical Committee for discussion and feedback. On July 7, 2025, staff presented the 24/7 Renewable Pilot proposal (Pilot) to the Executive Committee. The Executive Committee unanimously voted to recommend approval of the Pilot to the Board. The Pilot would be for a 24/7 100% renewable energy program for up to 400 municipal accounts, with a usage of about 2000 MWh/year, starting on 1/1/2026 for 3 years with an initial premium of ¢5.40/KWh, if approved by your Board.

Background

MCE's mission is to confront the climate crisis by eliminating fossil fuel greenhouse gas (GHG) emissions, producing renewable energy, and creating equitable community benefits. To advance cleaner energy goals in the state and make progress towards the mission, MCE offers three energy services to customers. These services include:

Light Green

Light Green is MCE's default service and provides 60% renewable energy (from sources like solar, wind, biogas, geothermal, and small hydroelectric) and 95% greenhouse gas (GHG)-free. The Light Green product has provided 60% renewable energy since 2017, 13 years earlier than California's target and accounts for over 5,000GWh in annual energy use. MCE plans to gradually increase the renewable content from 60% to 85% by 2031. Customers who join MCE in the 38 member communities across Contra Costa, Marin, Napa, and Solano Counties are automatically enrolled into this program.

Deep Green
Deep Green offers 100% renewable energy (typically sourced from wind and solar within California) at a current premium of ¢1/kWh above Light Green rates. It accounts for 6.7% of MCE customers and over 500GWh in annual usage. 50% of the premium goes towards funding local projects like Electric Vehicle (EV) rebates, heat pump water heater rebates and community housing initiatives.

Local Sol
Local Sol, while currently closed to new enrollments, offers 100% renewable energy from local solar resources to about 300 customers at a fixed rate of ¢14.2/kWh tied to a long-term contract. 102 customers receive a $20 monthly discount as part of MCE Care Credit[1]. Local Sol also accounts for over 1,500MWh in annual energy and supports renewable energy development.

In addition to the above service offerings, MCE is proposing the Pilot, driven by a combination of Board direction, regulatory changes, and customer interest. Starting 2028, the California Energy Commission (CEC) will require MCE to report all emissions associated with the previous year's generation on an hourly basis. Moreover, Marin Climate and Energy Partnership (MCEP), a consortium of all cities and towns in Marin County, and City of Novato have expressed interest in a 24/7 renewable product. The Pilot aligns with direction from the Board and customer interest in matching hourly load with renewable supply. It also advances MCE's goals for a cleaner future and provides valuable insights needed to effectively track and report energy and emissions on an hourly level prior to 2028.

Pilot Proposal
MCE proposes the Pilot which will offer 100% renewable energy for up to 400 municipal accounts starting on 1/1/2026 for 3 years with an initial premium of ¢5.40/KWh 24 hours a day, 7 days a week. Staff designed the Pilot after considering feedback from the Board, interest from member communities and underlying factors that would affect the feasibility of such a program. The details of the Pilot include:

Municipal accounts
MCE serves 38 member communities (municipals) comprising of Towns, Cities and Counties. The local governments for these municipalities are also MCE customers commonly referred to as municipal customers. Each Town, City and County may have a civic center or hall, administrative offices, libraries, housing facilities, fire and police departments among other properties. MCE assigns an account to each of these facilities for records and billing of services and collectively

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[1] MCE Cares Credit offers a $20 monthly discount to qualifying residential customers enrolled in California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA), and a $25 monthly discount to small businesses on A1 and B1 rates. On March 20, 2025, the Board extended the credit through March 2026. This credit aims to alleviate high energy bills and is available on a first-come, first-served basis.

groups them as municipal accounts. As a result, each municipal customer has multiple municipal accounts depending on size and number of facilities owned.

There are 6,138 municipal accounts accounting for 188GWh in annual energy use. 3,144 accounts are enrolled in Deep Green representing 22.5% of Deep Green usage[2]. The Pilot seeks to offer up to 400 municipal accounts, hourly matching of load and supply in line with expressed interest from City of Novato and MCEP. This represents about 2,000 MWh in annual energy use accounting for 1% of all municipal load.

Renewable Sources

A variable mix of different renewable energy sources is essential to match hourly load with supply. The combination of solar, wind, battery paired with solar, and geothermal[3] resources form an ideal portfolio for delivering 24/7 renewable energy due to their complementary strengths.

Solar generates abundant energy in the day but is limited during cloudy periods. Wind power, which often peaks in evenings and seasonally, complements solar by providing energy when solar output is low. Both solar and wind are intermittent in nature and dependent on variable weather and need to be complimented by dispatchable and base load resources to meet the hourly requirements of the Pilot.

Battery storage, paired with solar, captures excess energy in the middle of the day and discharges it during peak time in the evening hours. Geothermal energy, with its steady, around-the-clock output, acts as a reliable baseload to fill gaps when solar and wind are insufficient. This diverse mix leverages the intermittent nature of solar and wind, the dispatchable capacity of batteries, and the stability of geothermal to achieve hourly-matched renewable energy.

Considerations

MCE proposal to offer the Pilot to 400 Municipal accounts was guided by several limiting factors. It also supports the Pilot's goal of testing and learning measures for scaling and reporting.

- Solar and wind resources continue to face curtailments and must be overbuilt by 3 to 5 times the size of a baseload resource like geothermal, to provide the same level of reliability.
- MCE needs to balance between economically dispatching the batteries and shifting the energy to match load. This balance limits the hours in which the fleet of batteries in MCE's portfolio can be dispatched.
- While geothermal provides stable base load energy across all hours, its reliability is not guaranteed as geothermal resources undergo periodic scheduled maintenance.

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[2] Calculations are based on 2024 energy use.

[3] California Power Source Disclosure rules treat geothermal power as zero emissions, although Geysers does have a de minimis amount of geological CO2 emissions associated with its operations.

The costs of solar, wind, battery storage, and geothermal resources vary significantly. Solar and wind are cheaper in comparison to batteries and geothermal. However, recent supply chain, administrative actions and inflation pressures continue to drive up procurement costs. Batteries costs are tied to the capacity and duration of the resource, unlike energy generating resources, and are expensive to acquire. Geothermal, while stable and reliable, is a scarce and highly sought after source of renewable energy, making it the more expensive option. The Pilot integrates these resources, relying on batteries and geothermal to supplement the hours where solar and wind fall short. It is therefore essential to include the costs associated with this portfolio in calculating the Pilot premium to adequately account for the energy procurement costs.

MCE ran an analysis using the identified resources, accounting for their limitations, and found that the available portfolio can comfortably meet the hourly needs of up to 400 accounts without compromising the ability to affordably meet Light Green and Deep Green targets.

Rate-Premium

The methodology for calculating Pilot rate premium contains two distinct parts.

a. Incremental firm shaped renewable energy cost.
   This is the net cost of procuring firm shaped renewable energy needed to match hourly load. 24/7 renewable energy supply is scarce and very expensive to acquire in the short-term market. MCE, therefore, secures long-term Power Purchase Agreements (PPAs) to provide renewable energy on an hourly basis. To arrive at the premium of ¢5.40/kWh, staff extracted the energy portion of the cost from the PPA price after netting out all revenues gained in the market by the PPA resource.

b. Light Green cost savings
   This is the savings realized in not procuring renewable and carbon-free energy replaced by the hourly renewable energy when a customer opts for the Pilot.

This methodology promotes and accelerates the acquisition of long-term PPAs that align with MCE's mission and can scale up with a potential expansion of the Pilot. It also reduces the reliance of short-term renewable energy in meeting MCE targets and sustainability goals. MCE can deliver a robust Pilot, while contributing to grid reliability, and ensuring cost equity.

Pilot Goals:

MCE is committed to leading the transition to clean energy by providing energy services that meet evolving customers' needs and regulatory requirements. The Pilot will provide valuable data and insights necessary to provide hourly matching of load and supply for all MCE customers as an option. The goals of the Pilot include:

1. Offer a continuous 24/7 renewable energy option for customers looking to go beyond Deep Green.

2. Assess the interest in an hourly renewable product across different customer types and categories.
3. Identify which customer load profiles are most compatible with our current supply portfolio.
4. Develop efficient methods to track and report hourly metrics for emissions and energy usage.
5. Accurately price the Pilot to cover the cost of procured resources.
6. Determine the price point customers are willing to pay for an hourly product.
7. Plan the effective expansion of the pilot program to a broader base of MCE customers and eventually to the entire MCE load.

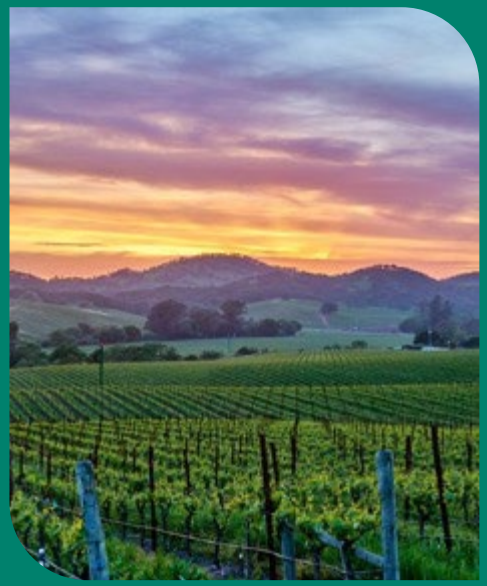
Fiscal Impacts:

If the Pilot is enrolled to capacity, MCE estimates an annual revenue of $108,000, sufficient to cover the Pilot's procurement costs.

Recommendations:

1. Approve the 24/7 Pilot Proposal for up to 400 municipal accounts, with a usage of about 2000 MWh/year, starting on 1/1/2026 for 3 years with an initial premium of ¢5.40/KWh.
2. Approve the rate-premium methodology for the 24/7 Pilot premium and direct staff to update the premium annually during MCE budget-setting.

MCE 24/7 Renewable Energy Pilot Proposal



July 17, 2025

Agenda

- Background of MCE Service offerings
- Proposed 24/7 Renewable energy pilot product
- Next steps

Choice is Power

Default Service

MCE
Deep Green
100%
RENEWABLE

MCE
Light Green
60%
RENEWABLE

MCE
Local Sol
100%
SOLAR

Choice is power

Deep Green

100% Renewable, typically sourced from CA wind and solar

- 6.7% of MCE Customers
- Over 500 GWh in annual energy

Light Green

60% renewable

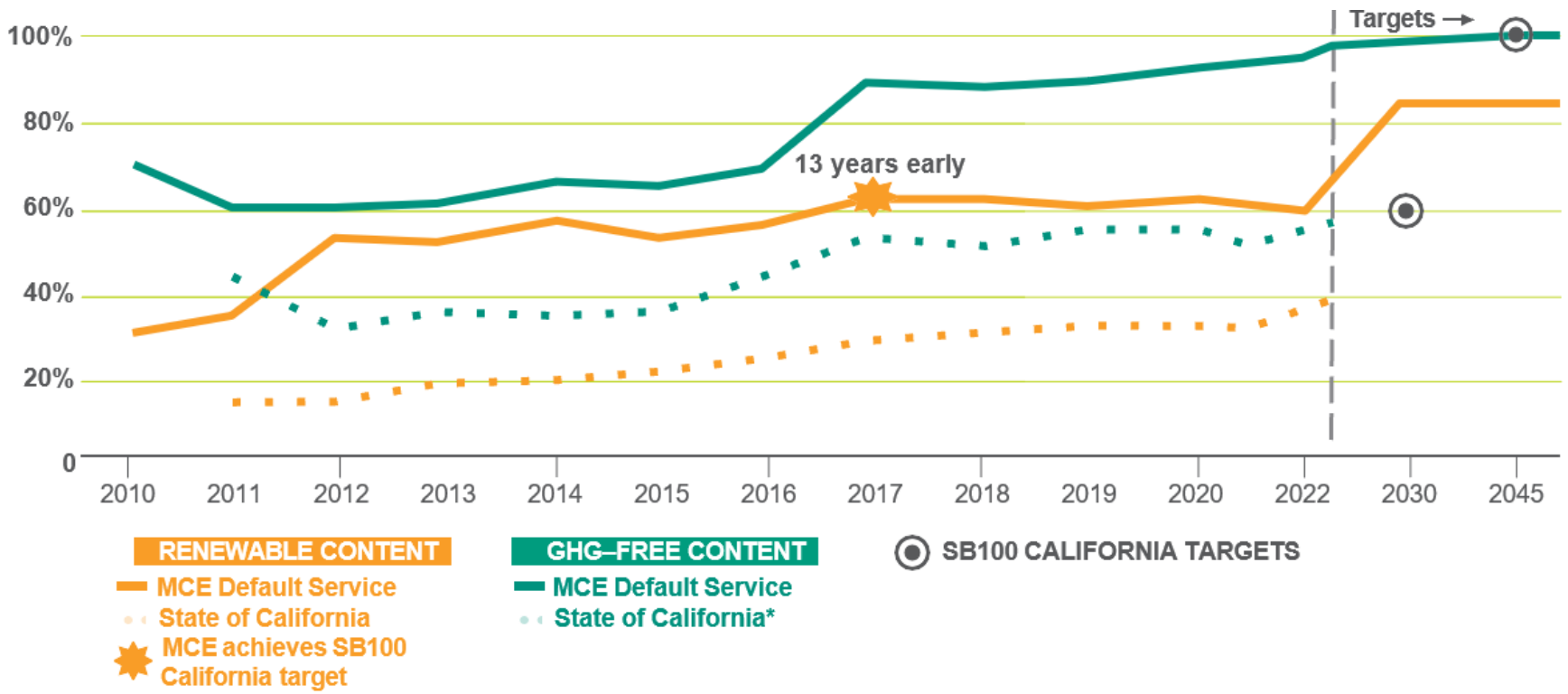
- Default program
- Gradually increasing to 85% renewable by 2031
- Over 5,000 GWh in annual energy

Local Sol

100% from local solar resource

- Limited to 300 Customers
- Closed to new enrollment
- Premium price fixed to a long-term contract
- 1,500 MWh in annual energy

MCE's Clean Energy



100%
fossil-free

95%
greenhouse gas-free

60%
renewable
compared to 38% from PG&E

13 years
earlier than state goals

Proposed 24/7 Renewable Pilot Offering

Background

August 17th, 2023

MCE Board directs staff to explore a new 100% GHG-Free 24/7 service offering

May 3rd,2024

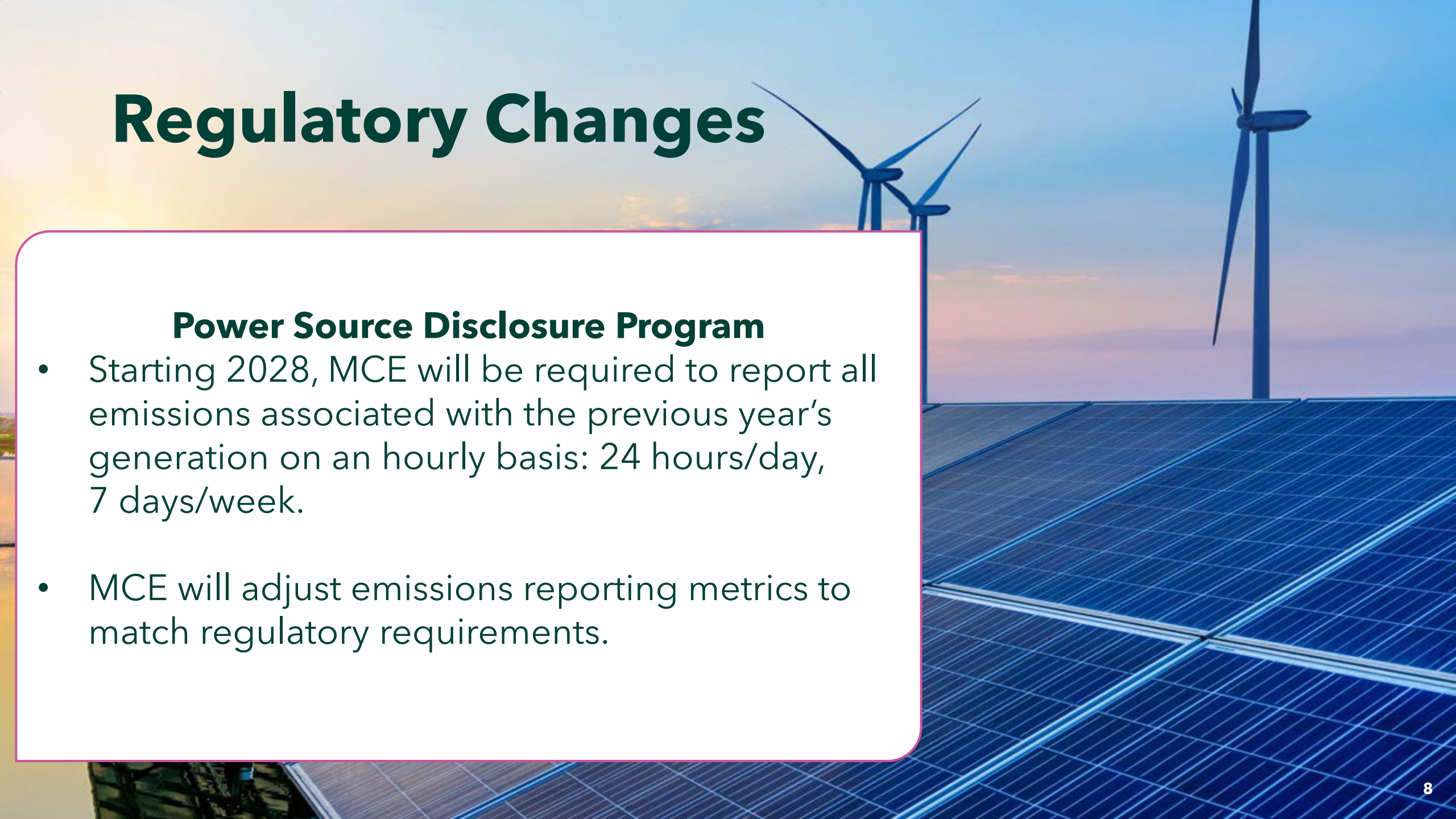
MCE staff presented the Proposed 24/7 Fossil-Free Pilot Energy Service to the Technical Committee

July 7th,2025

MCE Executive Committee recommended approval of a limited 24/7 renewable pilot to the Board

Marin Climate and Energy Partnership, a consortium of all cities and towns in Marin County and City of Novato have expressed interested in a 24/7 renewable product

Regulatory Changes



Power Source Disclosure Program

- Starting 2028, MCE will be required to report all emissions associated with the previous year's generation on an hourly basis: 24 hours/day, 7 days/week.

- MCE will adjust emissions reporting metrics to match regulatory requirements.

Proposed 24/7 Renewable Pilot

- Product: 24/7 Renewable Energy
- Initial Premium: ¢5.40/kWh premium (added to Light Green Rate), can be updated with the budget cycle
- Customers: Capped at 400 Municipal accounts
- Timeline : 1/1/2026 – 12/31/2028 (3 Years)
- Renewable sources: Solar, Wind, Storage and *Geothermal**
- Reporting Framework: Hourly matching and reporting of load and supply

**California Power Source Disclosure rules treat geothermal power as zero emissions, although Geysers does have a de minimis amount of geological CO2 emissions associated with its operations.*

Municipal Accounts

Municipal Accounts include all Town, City, and County accounts

Offices

Libraries

Fire Departments

Housing facilities

Police departments

6,138
Accounts

188
GWh in annual energy

3,444
Deep Green Accounts

22.5%
of MCE's Deep Green usage

Proposed 24/7 Program

Pilot program will be limited to a small number of customers.

Considerations:

- Difficult and/or costly to acquire 24/7 carbon-free renewable resources
- These resources are more costly than MCE's standard portfolio
- Wind and solar projects must be overbuilt and/or incorporate storage
- Overbuild would be 3 to 5 times the size of a non variable 24x7 resource to provide the same level of reliability
- Customer hourly load profiles and demand must fit within the purchased resources

2,000
Annual MWh expected to be served

Number of accounts targeted
400

Annual MWh is approximately 1% of all Muni load

Methodology for Calculating Pilot Premium

24/7 pilot premium above Light Green

=

Cost of procuring additional firm shaped renewable energy
$71/MWh

−

Light Green cost savings
$17/MWh

¢5.40/kWh

The 24/7 pilot premium could be updated annually during MCE budget-setting

Proposed Pilot Goals

- Offer a continuous 24/7 renewable energy option for customers looking to go beyond Deep Green.
- Assess the interest in an hourly renewable product across different customer types and categories.
- Identify which customer load profiles are most compatible with our current supply portfolio.
- Develop efficient methods to track and report hourly metrics for emissions and energy usage.
- Accurately price the Pilot to cover the cost of procured resources
- Determine the price point customers are willing to pay for an hourly product.
- Plan the effective expansion of the pilot program to a broader base of MCE customers and eventually to the entire MCE load.

Next Steps; if Approved

- MCE, through its engagement and communications teams would market the pilot out to municipal account holders.
- MCE would launch the pilot program on 1/1/2026.
- The program would be open to the first 400 municipal accounts signing up.
- Pilot product will be reported on the Power Content Label (PCL) starting in 2027

Recommendations

1. Approve the 24/7 Renewable Pilot program for up to 400 municipal accounts, with a usage of about 2000 MWh/year, starting on 1/1/2026 for 3 years with an initial premium of ¢5.40/KWh

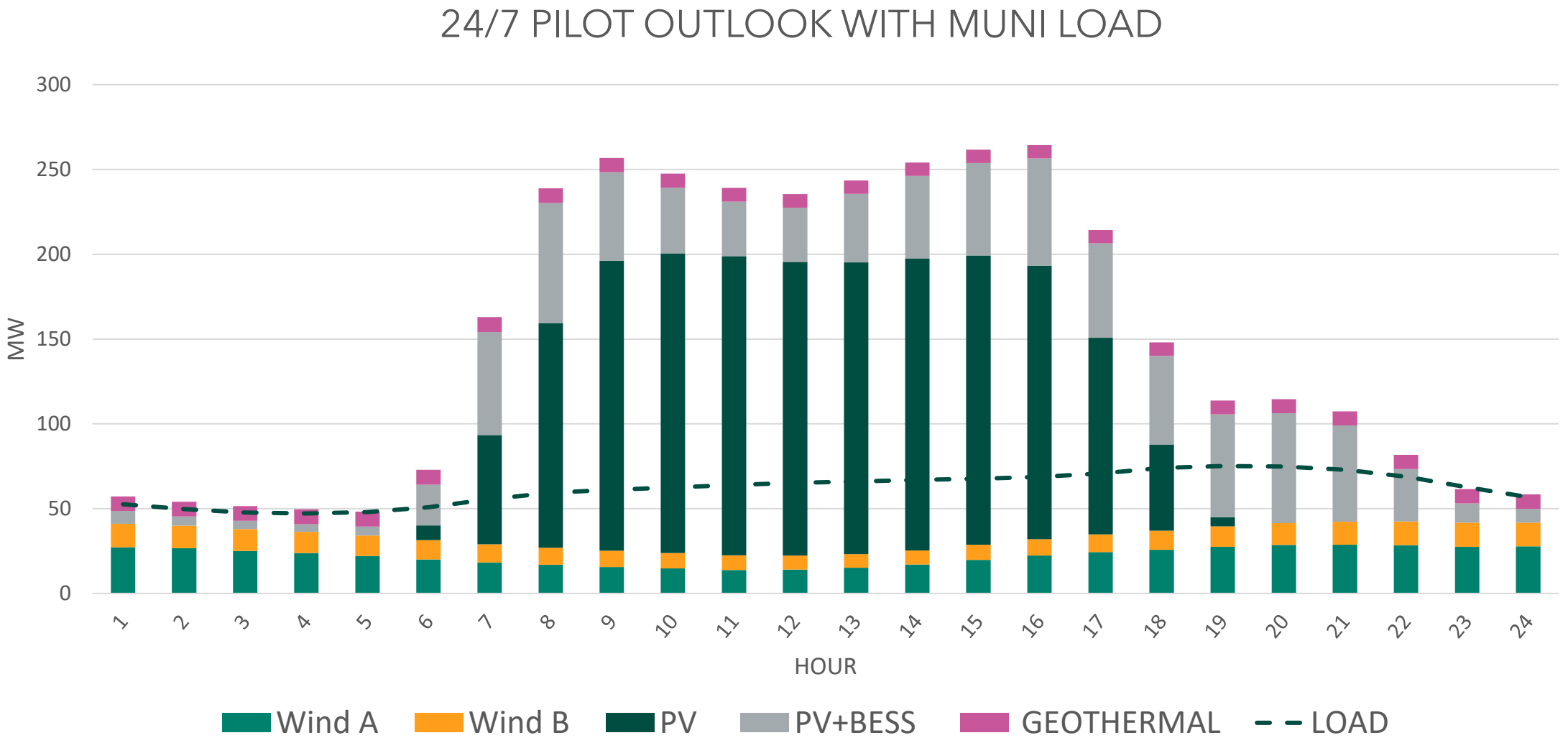
2. Approve the rate-premium methodology for 24/7 Renewable Pilot program and direct staff to update the premium annually during MCE budget-setting

Thank you!

MCE

mceCleanEnergy.org
info@mceCleanEnergy.org

Average Hourly Load vs Supply



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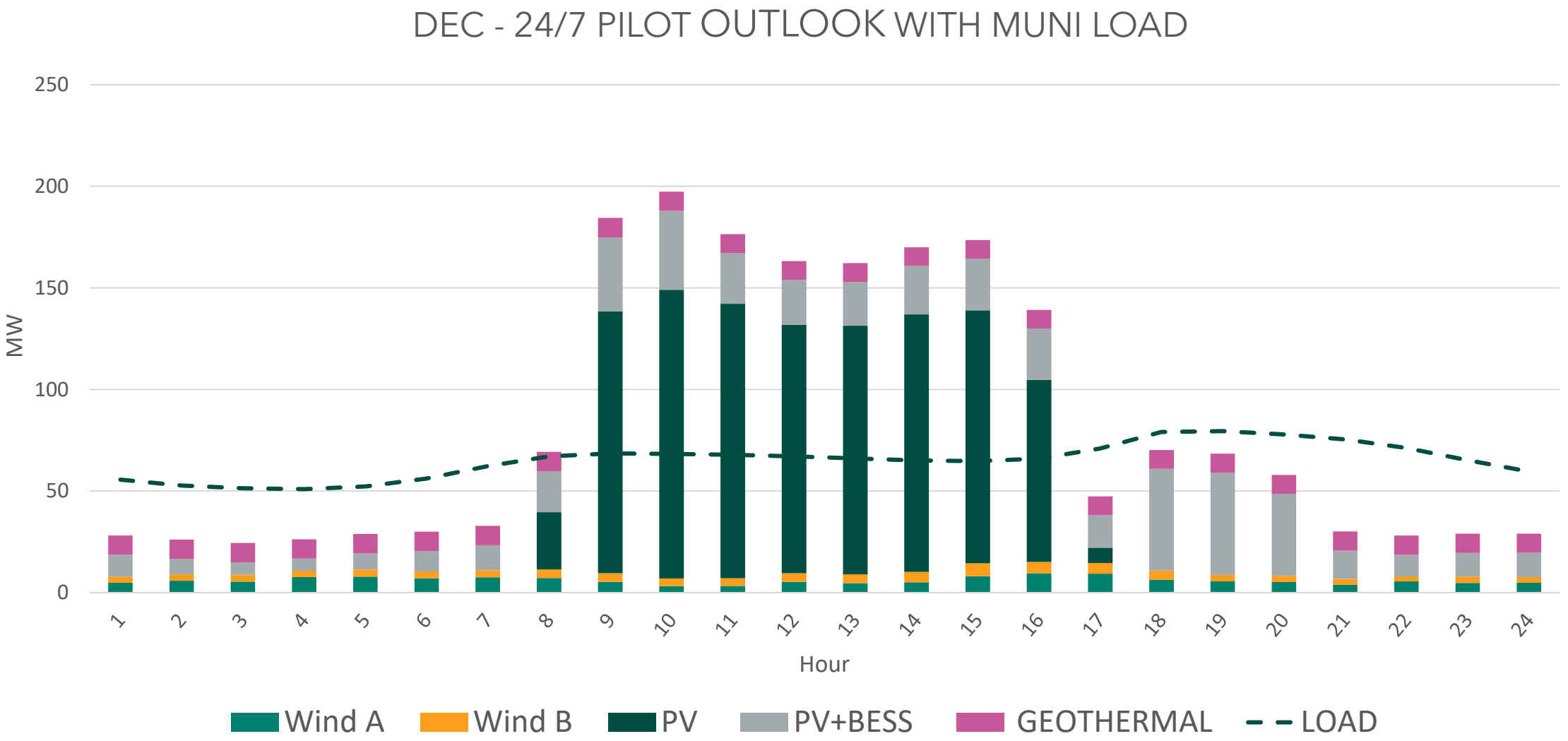
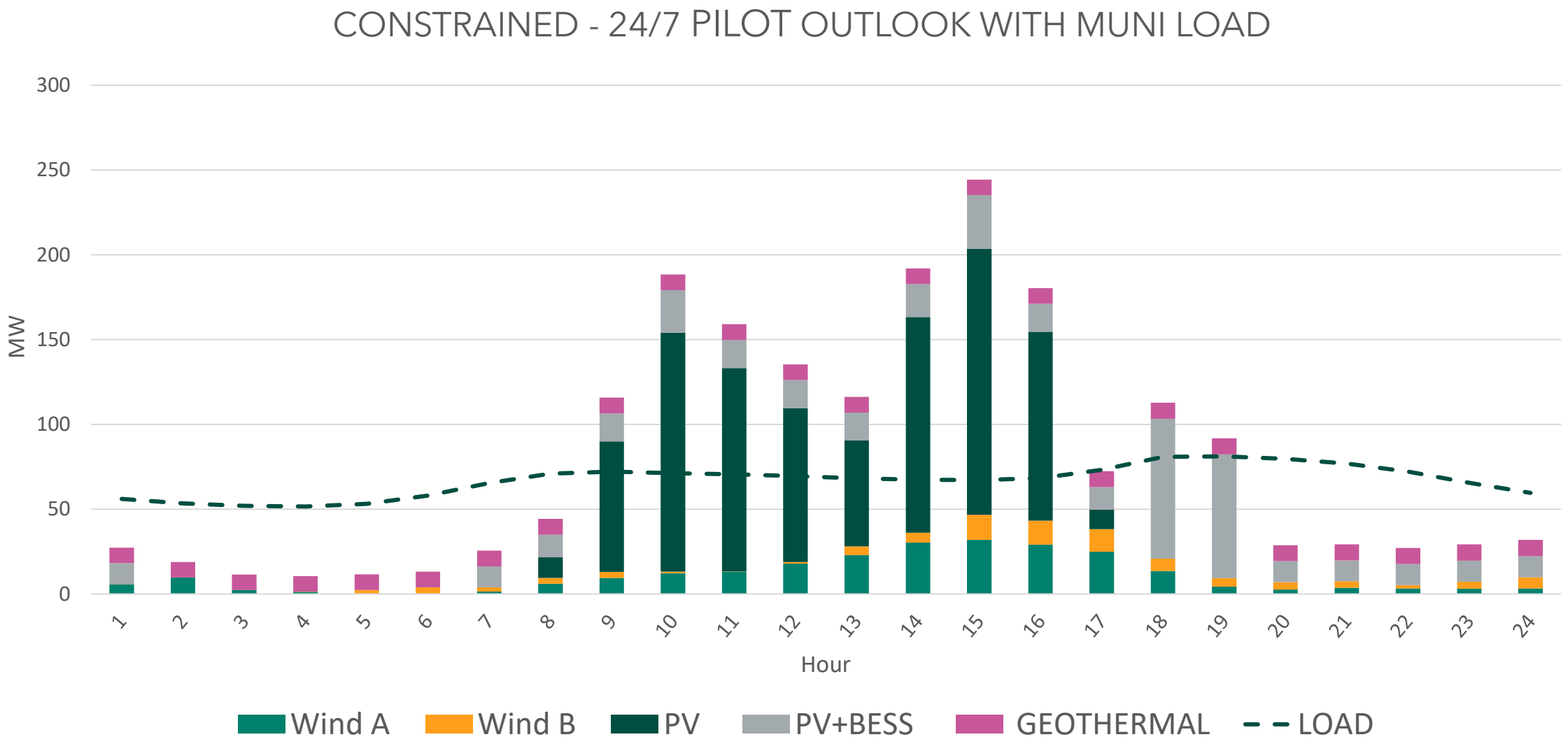
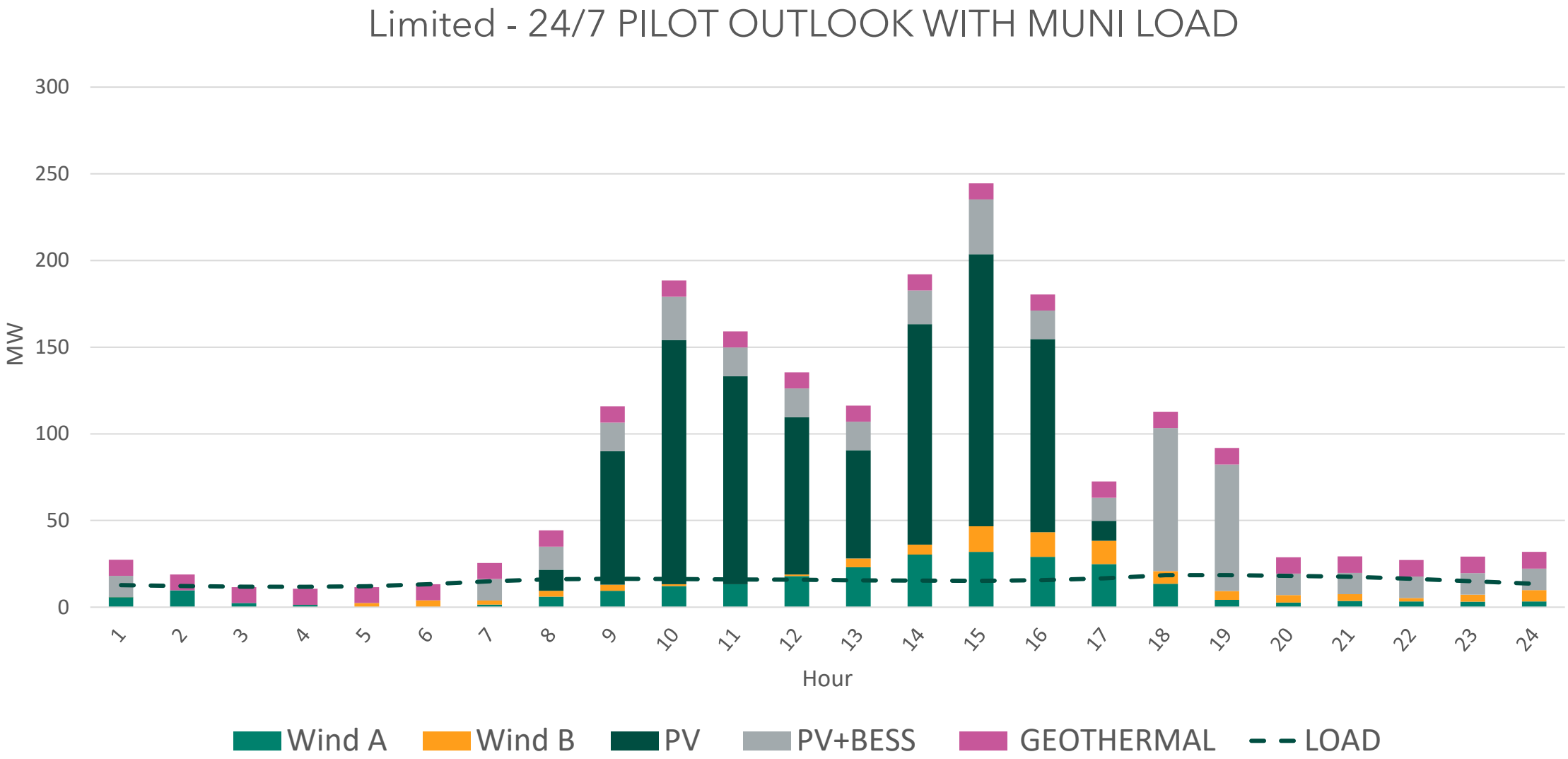


Average Hourly Load vs Supply

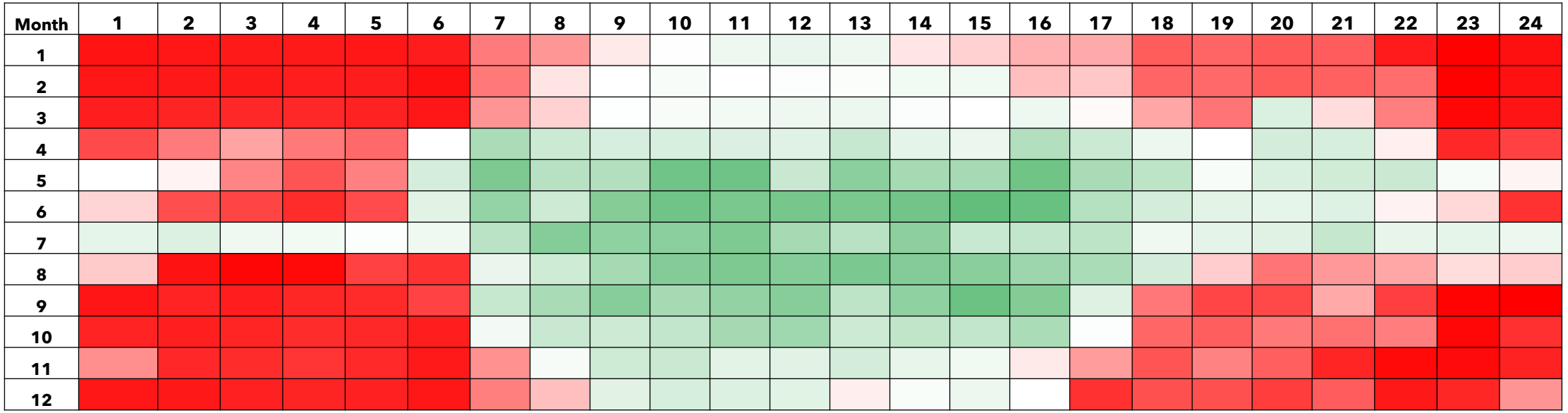


Average Hourly Load vs Supply



Average Hourly Load vs Supply

Limited - 24/7 Pilot Outlook Minimum Coverage



70% or less

100 %

150% or more

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July 17, 2025

TO:	MCE Board of Directors
FROM:	Jonnie Kipyator, Power Analytics Senior Manager
RE:	Update of Deep Green Premium Proposed Effective Date October 1, 2025 (Agenda Item #07)
ATTACHMENTS:	A. July 2025 Presentation on Deep Green premium B. August 2023 Presentation on Deep Green as Default

Dear Board Members:

Summary

MCE offers three main service options, Light Green (default, 60% renewable), Deep Green (opt in, 100% renewable) and Local Solar (opt in, 100% local solar). MCE's Deep Green program is a premium service option and currently about 6.7% of customers are opted into the program. Since its inception in 2010, MCE has charged Deep Green customers a premium of ¢1/kWh on top of the Light Green rate. The premium had initially been sufficient in accounting for and allocating the costs associated with acquiring additional renewable energy above the Light Green portfolio mix. However, starting in 2023, the price for renewable energy increased significantly, peaking in September 2024. Since that time, prices have come down somewhat but remain higher than in past years. The static premium for the Deep Green product has yielded under-collection of revenues in past years and the current year and is likely to lead to continued under-collection in future years if premiums are not adjusted to reflect market prices. As an example, in 2024, the cost to serve Deep Green was $10 million more than the revenues collected.

Due to the misalignment between the premium charged and price of renewables serving Deep Green, and the need to equitably allocate costs MCE staff proposes to:

1. Increase the Deep Green premium to ¢1.50kWh as option A, or ¢1.25/kWh as option B.
2. Update the premium annually during MCE budget-setting.

The proposed updates to the Deep Green premium would position MCE to maintain financial stability by aligning costs with the premium, advancing clean energy goals, and equitably allocating costs to different classes of customers.

Background

MCE's mission is to confront the climate crisis by eliminating fossil fuel greenhouse gas (GHG) emissions, producing renewable energy, and creating equitable community benefits. There are three power-supply product pathways that MCE has identified to move towards achieving its mission.

1. Increase the Light Green renewable content from 60% currently to 85% by 2031.
2. Continue to offer Deep Green as an option for all customers.
3. Seek market conditions that will allow MCE to resume defaulting customers into Deep Green.

These pathways will not only increase the renewable footprint of MCE but also reduce GHG emissions in California. Since launching in 2010, MCE's renewable energy programs, including Deep Green, have eliminated over 500,000 metric tons of GHG emissions. This is equivalent to replacing 116,000 gas-powered cars. Deep Green energy is typically sourced from wind and solar resources within California, with geothermal and out-of-state wind as eligible options. These types of resources are GHG-free except for geothermal which has de minimis emissions associated with its operations.

Additionally, MCE transfers 50% of the Deep Green premium into the Program Development Fund. This fund houses various programs related to transportation and building electrification.

- Transportation electrification
    - Rebates for newly purchased and leased EVs for income-qualified residents
    - Rebates for EV charging ports installed at workplaces and multifamily properties.
    - MCE's EV smart charging app, MCE Sync, which automates home EV charging to use the least expensive and cleanest energy on the grid.
- Building electrification
    - Rebates for electric, grid-enabled Heat Pump Water Heaters
    - Emergency Replacement Water Heater Loaner program to facilitate electrification at the point of existing water heater failure.
- Community Housing Incentives
    - Funds for building remediation and repair work for homeless shelters and other community housing resources that would otherwise be a barrier to accessing energy efficiency programs.

Deep Green adjustments

On August 18, 2022, the MCE Board of Directors (Board) approved the staff proposal to make Deep Green the default service as a pilot option for New Accounts[1] receiving service with MCE, effective January 1, 2023. Customers starting a new account were provided with the option to remain in the Deep Green program, choose Light Green 60% renewable, choose Local Sol 100% local solar, or opting out of MCE's electric generation service.

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[1] New Accounts refers to customers that are starting MCE service based on the creation of a new PG&E account. In the event of a new community enrollment, MCE will determine feasibility of default enrolment into Deep Green in partnership with the member jurisdiction subject to the approval of your Board.

This pilot significantly accelerated MCE's progress towards achieving our mission. As of August 2023, Deep Green enrollments were over 67,000 accounts, representing a 406% increase since December 2022. Deep Green participation increased from 2.2% in December 2022 to 10.9% at the end of the pilot in August 2023. More than 7,500 customers enrolled in discount rate programs received Deep Green at no extra cost.

As described in Attachment B, on August 17, 2023, the Board approved staff's proposal to pause Deep Green auto enrollments and make Light Green the default service option due to an unanticipated shortage of renewable energy supply coupled with drastic increases in renewable energy prices. The rapid increase in energy prices did not stop in 2023 and prices continued to rise, reaching a peak in September 2024 before a partial decline to levels higher than historic prices.

Discount rate programs
MCE participates in discount rate programs available to all eligible customers, including those enrolled in Deep Green, as detailed below:

- California Alternate Rates for Energy (CARE) is a discount program that offers a 35% discount on electricity bills to income-qualified households. Eligibility is based on household size, gross income, or participation in public assistance programs.
- Family Electric Rate Assistance (FERA) provides an 18% discount on electricity to households of three or more with qualifying incomes. Like CARE, eligibility depends on household size and income.

In addition to the statewide programs described above, MCE also offers the MCE Cares Credit $20 monthly discount to qualifying residential customers enrolled in CARE or FERA, and a $25 monthly discount to small businesses on A1 and B1 rates. On March 20, 2025, the Board extended the credit through March 2026. This credit aims to alleviate high energy bills and is available on a first-come, first-served basis. Additionally, MCE offered a $5 per month Deep Green Fairfax Credit to the first 100 customers in the Town of Fairfax to enroll in Deep Green, for a period of one year. This $5 credit covers the cost of Deep Green for a typical Fairfax home.

Market Conditions and Impacts on Deep Green
Before 2023, as indicated in Table 1 below, renewable energy prices averaged $14 per MWh. The stability in price allowed the ¢1/kWh premium to sufficiently account for the incremental cost associated with providing 100% renewable energy to Deep Green customers. However, starting January 2023, prices rose from $19/MWh to over $90/MWh, an over 500% increase, within 2 years. The prices have since settled around $24/MWh, higher than pre – 2023 levels.

During this period of price volatility, MCE continued to offer Deep Green at the initial premium, while the costs associated with acquiring renewable energy significantly increased. If the premium remains unchanged, MCE will have to continue allocating the unfunded costs to the base Light Green rate charged to all customers. This would result in Light Green customers subsidizing the Deep Green product, raising concerns about unfair cost allocation.

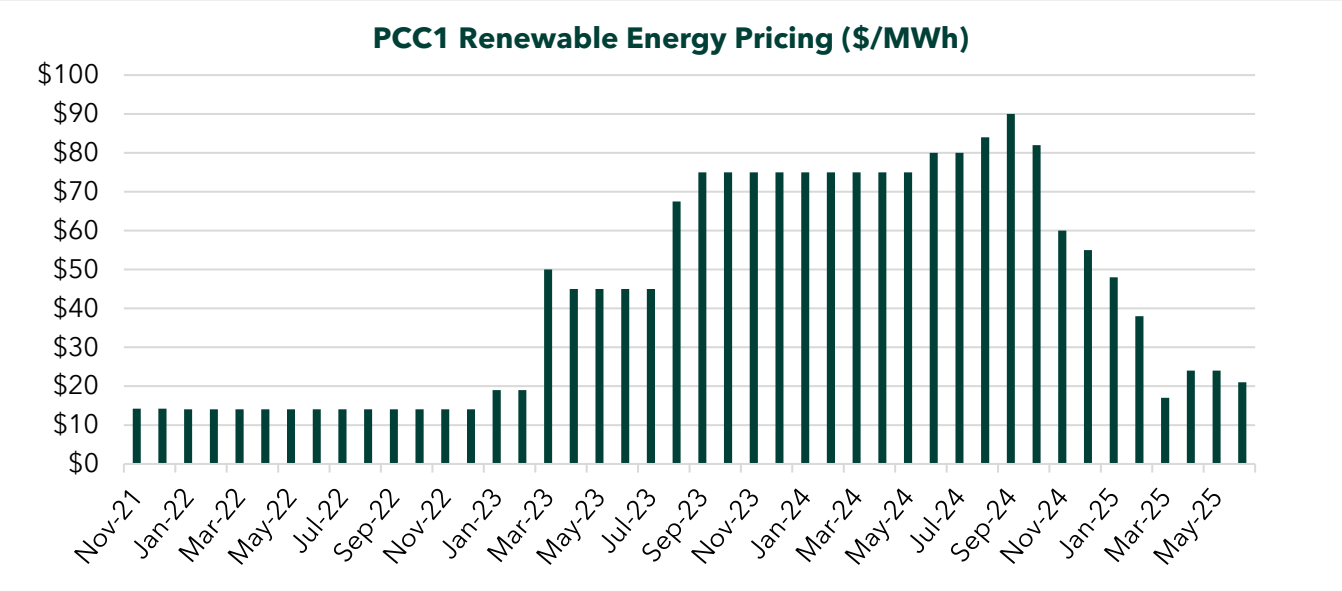


Table 1. PCC1 renewable energy prices ($/MWh)

With prices stabilized, MCE proposes updating the premium to align costs with energy usage, ensuring equity across the customer base, and maintaining financial stability.

Proposed Updates to Deep Green

Over the last two years, due to changes in supply chains, cleaner goals among energy providers, increased costs in developing renewable energy and a changing legislative landscape, the price of renewables have become more volatile. To closely match the Deep Green premium to the actual cost of energy, MCE staff have developed a methodology for calculating and updating the premium annually as needed.

Premium methodology

The methodology for calculating Deep Green premium would contain three distinct parts.

a. Incremental renewable energy cost.
   This is the cost of procuring additional energy to increase the renewable content of the customer from 60% to 100%.
b. Carbon-Free cost savings
   This is the savings realized in not procuring carbon-free energy replaced by the incremental renewable energy when a customer opts up to Deep Green.

c. Local projects Fund Adder
This is the portion of Deep Green premium, ¢0.50/kWh, which goes towards funding local programs as discussed above.

Figure 1.

As shown in the illustration above, an increase in renewable energy prices without an equivalent increase in carbon-free pricing leads to a higher premium. Applying the same methodology with 2024 and 2025 prices would result in a premium of ¢2.90/kWh and ¢1.18/kWh, respectively. The current Deep Green premium of ¢1/kWh is not aligned with the premium required to adequately serve Deep Green customers.

In 2024, Deep Green customers accounted for 526 GWh in energy use and $5.26 million in revenue. However, the cost to acquire renewable energy for Deep Green was over $15 million resulting in approximately $10 million of costs being shifted to all other MCE customers. While prices are not as high in 2025, the actual cost to procured energy for the Deep Green product is currently18% higher than collected revenue.

Actual costs for procuring renewable energy are not known until settlements are completed, about 3-6 months after the energy is used. The methodology described above would allow for annual adjustments based on best available cost projections. Also, for customer understanding, the premium would be set in quarter increments of ¢1.

Proposed update
MCE staff propose an increase in the premium and provide two options for your Board's consideration. The premium increase would ensure that Deep Green customers account for the incremental costs of renewable energy. This would replace reliance on the default Light Green customers, promoting cost equity and preserving affordability across MCE's broader customer base.

Option A. Increase the premium to ¢1.50/kWh allowing for cost recovery and absorption of price fluctuations. The monthly bill of an average residential and commercial customer would increase by $2.23 and $5.84, respectively. This translates into a bill increase of 1.2% for residential customers and 1.1% for commercial customers.
Option B. Increase the premium to ¢1.25/kWh, aligning closely with the current cost to serve Deep Green while allowing for modest cost recovery. The monthly bill of an average

residential and commercial customer would increase by $1.11 and $2.92, respectively. This translates into a 0.6% bill increase for both classes of customers.

Fiscal Impacts:

The increase in Deep Green premium would result in the below impacts based on the projected Deep Green Load of 500GWh, and based on projected energy costs for the remainder of the fiscal year

Option A would result in an estimated $7.5 million in total annual revenue from Deep Green customers, a $2.5 million increase. In comparison, the cost of procuring Deep Green is estimated at $5.9 million.

Option B would result in an estimated $6.25 million in total annual revenue from Deep Green customers, a $1.25 million increase. In comparison, the cost of procuring Deep Green is estimated at $5.9 million.

Recommendations:

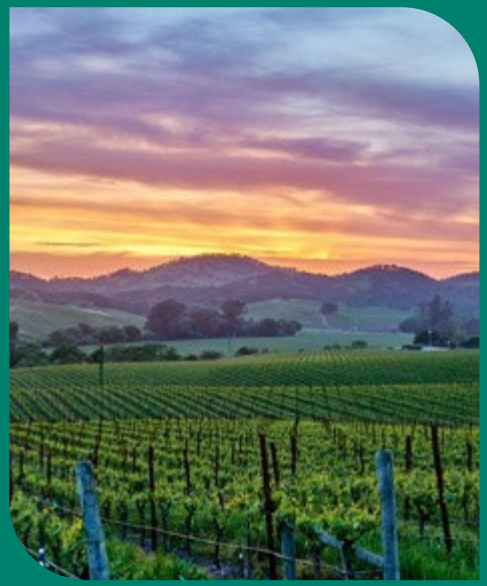
1. Select Option A or B:

Option A. Approve an increase to the Deep Green premium from ¢1/kWh to ¢1.50/kWh, effective October 1, 2025, for an overall average bill increase of 1.2% for residential customers and 1.1% for commercial customers.

Option B. Approve an increase to the Deep Green premium from ¢1/kWh to ¢1.25/kWh, effective October 1, 2025, for an overall bill increase of 0.6% for residential and commercial customers.

2. Approve the rate-premium methodology for the Deep Green premium and direct staff to update the premium annually during MCE budget-setting.

Update of Deep Green Premium



July 17, 2025

Agenda

- Background of Deep Green
- Proposed update of Deep Green premium
- Next steps

Pathways towards MCE's mission

Confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.

1. Increasing renewable/GHG-free content in Light Green. MCE will gradually increase its renewable content from 60% to 85% by 2031.

2. Continue to offer Deep Green as an option for all customers.

3. Seeking market conditions that will allow MCE to again begin defaulting customers into Deep Green.

Background

May 7th, 2010

MCE launches Deep Green

August 18th,2022

MCE Board approves Deep Green as the default product for new accounts effective 1/1/2023

January 1st,2023

Deep Green as a default product for new accounts is launched

August 17th,2023

MCE Board approves pausing Deep Green as the default product for new accounts

Marin Climate and Energy Partnership, a consortium of all cities and towns in Marin County, and City of Novato have expressed interested in a 24/7 renewable product

Understanding Deep Green

Deep Green was the default program January 1st, 2023 – August 17th,2023

- 7,500 customers received Deep Green at no extra cost
- The pilot significantly accelerated MCE's progress towards achieving its goals
- Due to various market conditions, like curtailment, very high market prices and shortage in renewable supply the Board elected to pause automatic enrollment

67,000
Accounts enrolled by August 2023

406%
Increase in enrollment since December 2022

Understanding Deep Green

- **Since 2010 the Deep Green premium has been set at ¢1/kWh.**
- This premium is added to the Light Green rate and has remained constant while the cost of renewables have increased over time.
- MCE proposes to increase this premium to cover the current cost.
- ¢0.50/kWh of the premium goes to fund community programs.

Local Projects Fund

Income-Qualified EV Rebates

$3,500 per vehicle
Stacks with other incentives

MCE Sync

Automates EV charging at home to use the least expensive and cleanest energy on the grid

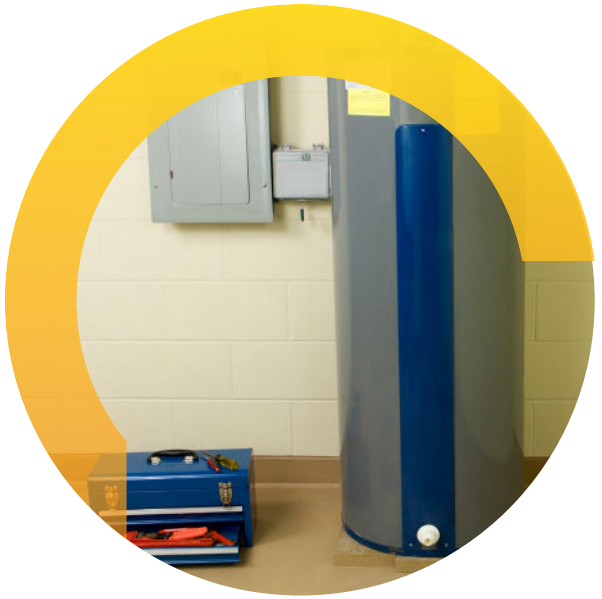
Workplace & Multifamily Charging

$3,000 rebates for workplace and multifamily properties

Local Projects Fund

Electric Heat pump Rebates

Heat pumps need to be grid-enabled



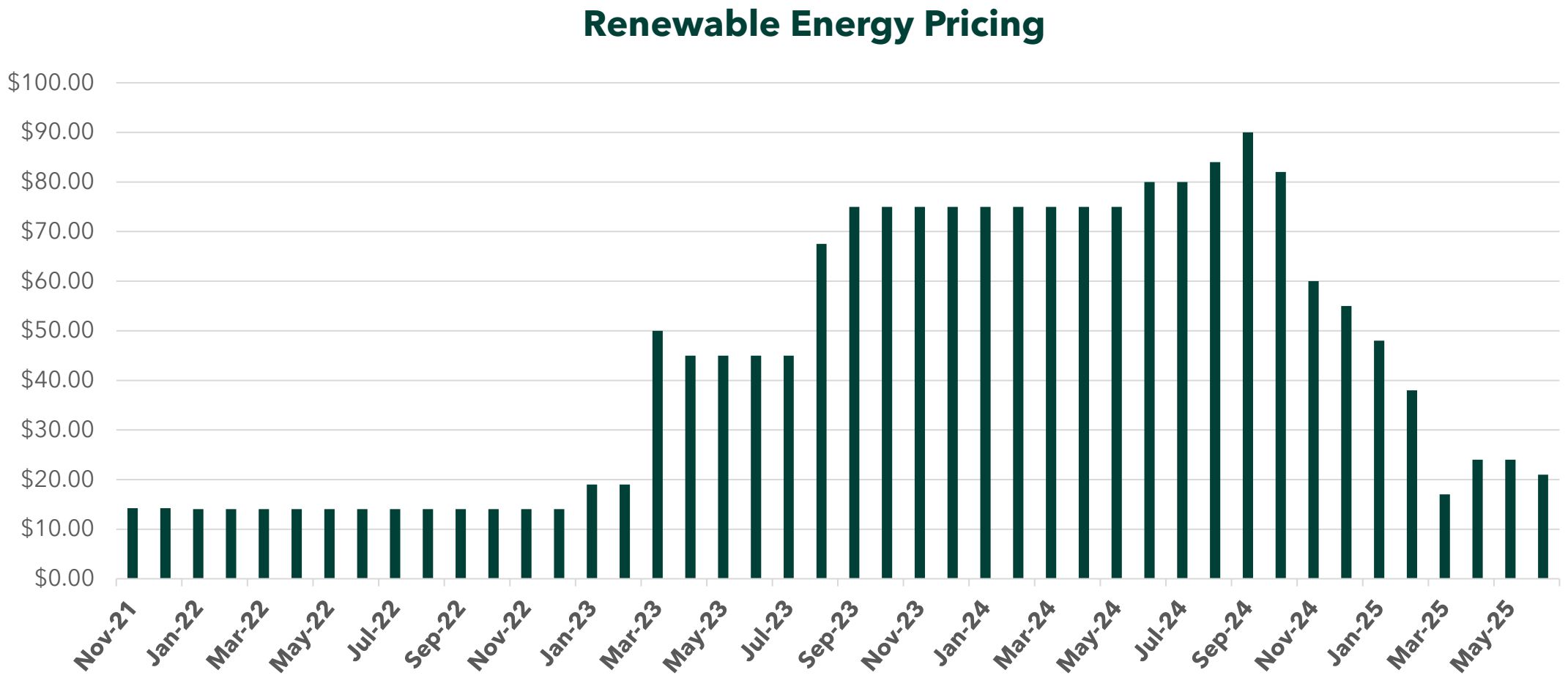
Emergency replacement water heater loaner

Facilitates electrification at the point of existing water heater failure

Community Housing Incentives

Funds building remediation and repair work for homeless shelters and other community housing

Renewable Energy Pricing



Methodology for Calculating Deep Green Premium

For customer understanding premium would be set in increments of ¢1.

Deep Green Premium Comparison

*The prices are based on ¢/kWh

	2024	2025	Proposed
Added cost of Deep Green Product	¢3.80	¢0.96	*Option A* **¢1.50**
Carbon Free Content Difference price	¢1.40	¢0.28	
Local Projects Fund Adder	¢0.50	¢0.50	*Option B* **¢1.25**
Resource cost premium	**¢2.90**	**¢1.18**	

1. The premium options are to allow for absorption of price fluctuations and cost recovery.
2. The cost for Deep Green has been higher than the premium in recent years

Deep Green Cost

2024 Deep Green under collection	**≈$10 Million**
2025 Deep Green under collection	**≈$1 Million**
Option A annual recovery*	**≈$1.6 Million**
Option B annual recovery*	**≈360,000**

Estimates reflect revenues above and beyond the cost of Deep Green, based on typical annual usage

Average Customer Bill Cost Comparison

	Current	Option A	Option B
Residential bill	$181.23	$183.46	$182.34
Commercial bill	$527.49	$533.33	$530.41
Percentage change in monthly bill*	-	Commercial: 1.1% Residential:1.2%	0.6%*

The percentage change applies for both residential and commercial

Approximately $2.5 Million goes towards local projects fund

Recommendations

1. Select Option A or B:

Option A. Approve an increase to the Deep Green premium from ¢1/kWh to ¢1.50/kWh, effective October 1, 2025, for an overall average bill increase of 1.2% for residential customers and 1.1% for commercial customers.

Option B. Approve an increase to the Deep Green premium from ¢1/kWh to ¢1.25/kWh, effective October 1, 2025, for an overall bill increase of 0.6% for residential and commercial customers.

2. Approve the rate-premium methodology for the Deep Green premium and direct staff to update the premium annually during MCE budget-setting

Thank you!

MCE

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MCE Empowering Our Clean Energy Future

CONTRA COSTA | MARIN | NAPA | SOLANO

Deep Green Update and Adjustment to Default

Agenda Item #06

Board of Directors | August 17, 2023

Background

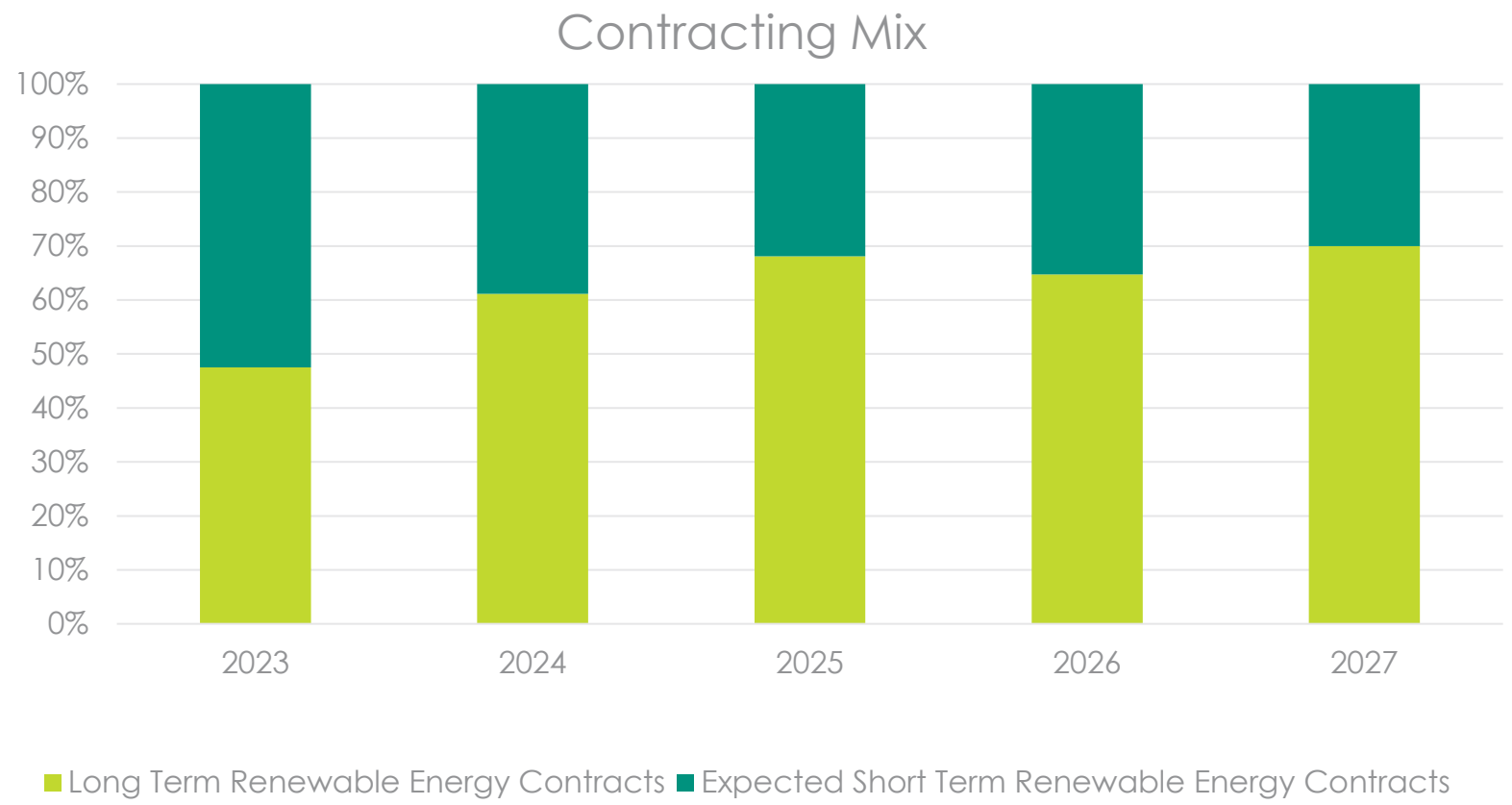
- On August 18, 2022, Board approved a pilot proposal to make Deep Green the default option
  - On January 1, 2023 Deep Green became the default option for new customers
- At the March 16, 2023 Board Meeting, MCE presented on procurement challenges and possible changes to Deep Green
  - Deep Green may include renewable energy from sources other than wind and solar and out-of-state resources
  - Board directed MCE to explore new GHG-free service offerings for customers

Deep Green Adoption

- As of August 2023, MCE has over 67,000 Deep Green accounts
  - This represents a 406% increase since December 2022
  - More than 7,500 low-income customers are receiving Deep Green at no additional cost
- Based on current projections, MCE must procure approximately 500 GWh of additional renewable energy to serve all new Deep Green customers through the end of 2023

MCE Portfolio

- A significant portion of MCE's procurement of renewable energy happens through short-term contracting
  - MCE has high exposure to the short-term renewable energy market
- This trend will change over time
  - MCE has recently signed many long-term contracts and will continue to add long term resources through contracting and project ownership



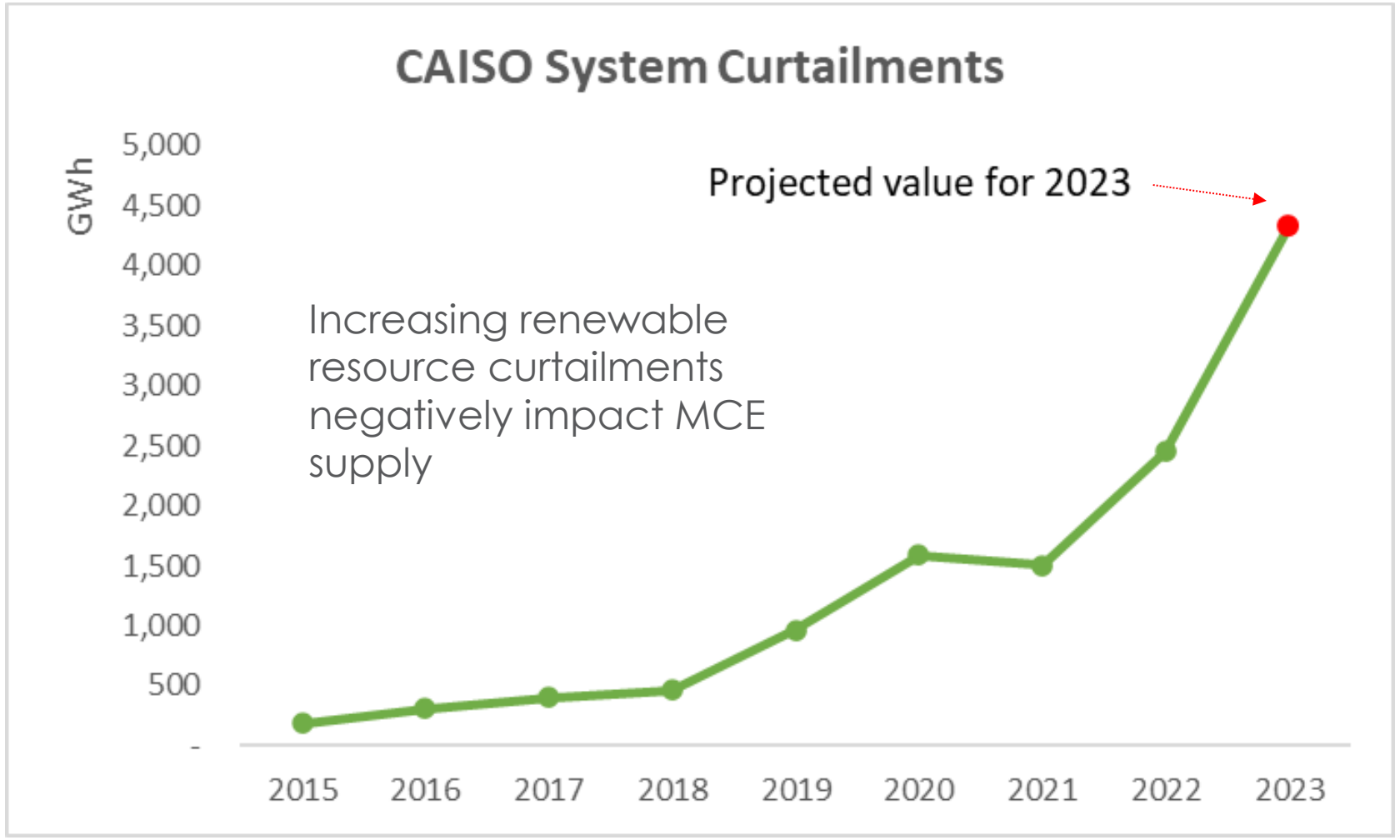
MCE must add long-term resources to reliably meet the increasing demand for Deep Green and increasing renewable content for Light Green

Recent Market Activity

- Prior to 2023, markets have been stable for short-term renewable energy purchases

- There's been a sudden shortage of supply in the market
  - MCE bids were not awarded in 2023 IOU solicitations
  - Insufficient offers were provided in response to MCE's most recent solicitation
- Prices have increased by a factor of 3-4 times from 2022 to 2023, and available volumes are extremely limited

Other Market Changes



Recent Procurement and Changes to Procurement Strategy

- MCE has executed seven new Power Purchase Agreements since 2022 adding approximately 1200 GWh of renewable energy annually
- Despite shortages in the market, MCE has secured contracts for 6% more renewable energy in 2023 so far compared to 2022
- Moving forward, MCE plans to incorporate a long-term contracting metric into the procurement strategy to minimize reliance on the short-term markets

Proposed Changes

- Pause automatic enrollments to Deep Green for new customers
  - Light Green would become the default option for new customers
  - Re-evaluate in 2024
  - For Deep Green opt up requests, evaluate on a case-by-case basis
- Explore a new 100% GHG-Free Product
  - Match customer hourly load profile with GHG-Free Energy using wind, solar, solar+storage, hydro and other GHG-free technologies

Recommendation

- Board of Directors direct MCE to:
  - Pause Deep Green auto enrollments and make Light Green the default service option at the end of the current billing cycle
  - Explore a new service offering - 100% GHG-Free product that will match hourly customer load with supply

Questions?